

*Blind root-suckers of the Sunderbans.*—By R. L. HEINIG, Deputy Conservator of Forests, Bengal, Communicated by the Natural History Secretary. Plate VI.

[Read August 2nd.]

The name "Sunderbans" is applied to the tract of littoral forest and cultivation that occupies the southern portion of the Ganges Delta, extending from the Hooghly river to the Meghna in the districts of the 24-Parganas, Khulna, and Backergunge. This tract is, roughly, 5,000 square miles in area, and comprises a large number of low-lying swampy islands formed by the principal rivers and their connecting water-channels.

The State Forests occupy the portion that extends from the Hooghly river to the Baliswar, on the western border of Backergunge. They are divided, both geographically and as to their legal status, into two approximately equal and well-defined areas, namely, the *Protected Forests*, extending from the Hooghly river to the Raimangal, in the district of the 24-Parganas; and the *Reserved Forests*, extending from the Raimangal river to the Baliswar in the Khulna district.

The *Protected Forests* are traversed by rivers not directly connected with the Ganges, and resembling estuaries or long arms of the sea; these rivers are very saline and subject to tidal influences throughout.

The principal species of forest tree is *Gozán* (*Ceriops Candolleana*, Arn.), a tree that does not develop root-suckers, but has short buttresses. It reproduces itself abundantly, and the innumerable stems and tangled roots of this species and of others with which it is associated, *Gengwá*, (*Excoecaria agallocha*, Linn.); *Hantál*, (*Phœnia paludosa* Roxb., &c.), serve, in the absence of herbaceous undergrowth, to protect the surface soil from erosion during tidal inundations, and to induce the deposit of alluvial mud.

The *Reserved Forests* are traversed by rivers directly connected with the Ganges, that bring down vast bodies of fresh water, especially during the rains. The principal species of forest tree is *Sundri* (*Heritiera fomes*, Buch.). The accessory species are *Pussur* (*Carapa moluccensis*, Lam.), *Amúr* (*Amoora cucullata*, Roxb.), *Keorá* (*Sonneratia apetala*, Lam.), *Ora* (*S. acida*, Linn. f.), and a few others. Each island is bordered by a zone of characteristic growth consisting of *Golpatta* (*Nipa fruticans*, Wurm.), *Hantál*, species of the mangrove family, *Keora*, *Ora*, *Kúmia* (*Barringtonia racemosa*, Blume.), &c. Behind this zone of riparian growth occurs the *Sundri* forest, pure, or mixed with

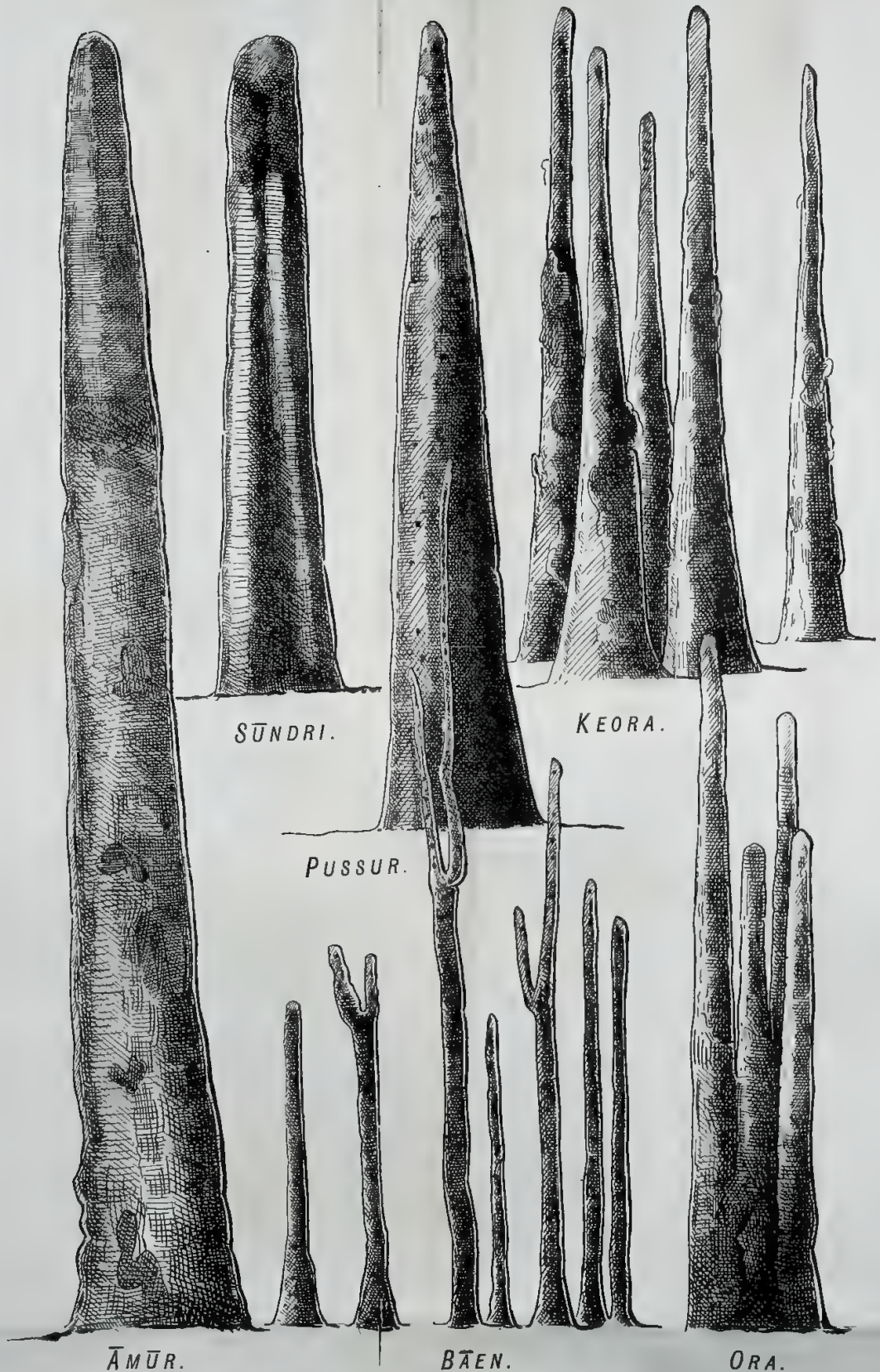
HEINIG, J

PL. VI.

*ORA.*

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BLIND ROOT-SUCKERS OF THE SUNDERBANS.

HALF NATURAL SIZE.

Drawn by R. L. Heinig, Indian Forest Service.